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ABSTRACT

A study investigated what effect, if any, a planned program of writing activities had on reading comprehension. A group of second grade students from Linden Elementary School, West Virginia, were the subjects. Subjects were divided into a control (12 students) and an experimental (13 students) group. Both groups were given a pretest and a posttest. The experimental group was exposed to a writing program consisting of language experience activities and received classroom instruction for approximately 30 minutes each school day. The t-test was used to analyze the data collected. The critical "t" was not exceeded in the posttest for the comprehension sentences or comprehension passages. Results indicated that while the writing activities did affect the comprehension of the experimental group, improvement was not statistically significant. (Eight tables of data are included; 28 references, a list of activities, 8 appendixes of data, and a list of examples of language experience activities are attached.) (RS)

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CS

Salem College (West Virginia)

ED 360 643

A STUDY TO DETERMINE THE EFFECT OF WRITING ACTIVITIES ON READING COMPREHENSION ON SECOND GRADE STUDENTS AT LINDEN SCHOOL

A Thesis

Presented to

the Faculty of the Graduate School

Salem College

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

CS213772

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by

Linda Collins

October 1987

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ABSTRACT

This study was conducted to investigate what effect, if any, a planned program of writing activities has on reading comprehension.

A group of second grade students from Linden Elementary School were subjects for this study. The students who participated in this study were divided into a control and an experimental group. Both groups were given a pretest and a posttest. The t-test was used to analyze the data collected. The critical t (2.069) was not exceeded in the posttest for the comprehension sentences or comprehension passages.

The results of this study, as interpreted by the researcher, are that the writing activities did affect the comprehension of the experimental group as indicated by the posttest versus pretest mean scores. Improvement, however, is not significant at the .05 level as measured by the t-test.

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CHAPTER 1

THE PROBLEM AND ITS SETTING

Introduction

The language arts are composed of listening, oral language, reading and written language. Although it is possible for one aspect of language development to be significantly lower than the others, achievement in any one area or combination of areas indicates that a student probably has the intellectual potential to succeed in all [18:17].

Reading, as one phase of language, is not a skill but a process involving many skills. It is defined as "the ability of an individual to recognize a visual form, associate the form with a sound and/or meaning he has learned in the past, and, on the basis of past experience, understand and interpret its meaning [18:3]." The last part of the definition "understand and interpret the meaning" or comprehension, is the most difficult component to teach in reading instruction.

A child comes to the teacher with a foundation (mental capacity, language ability, maturity) and background (direct experiences, vicarious experiences). The teacher must then take each student and try to develop his/her potential in word recognition, comprehension and utilization.

Purpose

The purpose of this study was to determine the effect, if any, of writing activities on reading comprehension in a group of second grade students at Linden Elementary School in Clarksburg, West Virginia. These students were pretested and posttested to see if writing activities had an effect on their scores in regard to reading comprehension.

Statement of the Problem

Will the experimental treatment (a program in written composition) produce positive results in reading comprehension for the experimental group when the pretest/posttest scores of both experimental and control groups are subjected to a t-test?

Hypothesis 1

There will be no significant difference at the .05 level on pretest and posttest t-scores of the CTBS test of the experimental and control groups in investigating the effects of the treatment upon the experimental group.

Hypothesis 2

There will be no difference in the trend followed by the mean scores on the CTBS test of the experimental and control groups from the pretest to the posttest in the study following the treatment upon the experimental group.

Definition of Terms

Comprehension Comprehension is the ability to translate word symbols into ideas. Success depends directly upon mental ability, background knowledge, maturity and

instructional method [18:15].

Word Recognition Word recognition is the ability to recognize a visual word symbol and associate it with its correct sound and meaning [18:10].

Mental Capacity Mental capacity is the basis for all learning. It affects the chronological age at which a student can begin formal reading, the development of perceptual skills needed in word recognition, the speed and level of comprehension attainable and the ability to interpret abstract information and ideas [18:8].

Language Ability Language ability is proficiency in understanding and using language. Reading is limited by any factor that reduces ability to communicate. The ability to understand and use oral language provides the background for reading comprehension [18:9].

Maturity Maturity encompasses the child's physical, social and psychological stage [18:10].

Direct Experience Direct experience involves the use of the senses of the individual in experiencing an event [18:12].

Vicarious Experiences Vicarious experiences are those

from which the child learns from extrinsic sources (verbal explanations, books, movies, radio, television, etc...) [18:13].

Potential Potential is the level at which a pupil can be expected to read based on his/her comprehension [18:107].

Utilization Utilization is putting words, information, ideas and new skills into use for future learning [18:16].

Linden Elementary School Linden Elementary School is a school located in the east end of Clarksburg. Linden has an enrollment of 268 pupils in grades K-6.

Achievement In this study, achievement will be indicated by an increase on the posttest scores in any of the two areas of the reading test.

Language Experience Language experience is a reading instruction approach which uses oral and written activities to improve reading skills, especially comprehension.

Communication Skills The communication skills are listening, speaking, reading and writing.

Sentence Combining Sentence combining is an activity

in which the child combines several short sentences into one grammatically correct sentence.

Limitations

This study was confined to the second grade of Linden Elementary School. The study was conducted over a twelve week period with a student population of twenty-five. Thirteen students comprised the experimental group while twelve students were the control group. Some ability differences between groups did exist prior to the pretest by reason of nonrandomized grouping. Because other factors such as maturation, increased motivation, or new experiences may have influenced positive change in comprehension, it is impossible to conclude that any positive change is a direct result of the treatment.

Summary

Learning to read is the most important single developmental task encountered by the student in the school setting [19:26]. Therefore, the purpose of this study was to determine the effect, if any, of writing activities on reading comprehension in a group of second grade students at Linden Elementary School. If there is a positive correlation between writing activities and reading comprehension, this study provided the framework for an

instructional program that had as its goals increased[6] learning and improved skills in writing and reading.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The goal of reading instruction is comprehension, but it is also the goal of everything else done in school [16:8]. Students who are able to organize their thinking on paper are in a better position to understand another writer's organization of ideas. This is what comprehension is all about [14:7].

Findings indicate that reading and writing have certain skills in common and that the presence of those skills should result in better performance in both areas [9:959]. Therefore, elementary school teachers are now being urged to explore ways of combining instruction in these areas as a means of improving student performance [9:958]. A teacher who elects to combine these areas of writing and reading has a variety of programs from which to choose. This chapter will address the following examples of some of these programs: language experience, sentence combining, dialogue journals and arrangement plan.

Relationship Between Reading and Writing

Research over the past ten years has shown the possibility of a strong relationship between reading comprehension and writing activities [5:129]. Reading and writing activities provide models for identifying syntactic,

semantic, and organizational structures that cue meanings and signal how ideas are related. As children manipulate written language patterns, they gain control over the patterns. Such learning leads naturally to reading and writing growth. If this is true, then efforts to integrate instruction in each area around common structures should enhance reading comprehension as well as writing competence [1:810].

Interest in the supportive relationship between reading and writing activities leads to the belief that writing activities have both general and specific influence on reading comprehension [1:810].

The researcher will accept the following assumptions to be true [1:811]:

1. Reading is a process of obtaining meaning from written symbols.
2. Writing is a process of expressing meaning with written symbols.
3. Both reading and writing are learned processes.
4. Reading involves the application of a learned assembly of strategies and levels of thinking to decode the ideas others have expressed. Similarly, writing involves the application of a learned set of strategies and levels of thinking for expressing ideas to others.
5. Vital and pleasurable experiences in writing and reading provide a more comprehensive means of

internalizing language.

6. The reader's reaction during reading and the writer's creation during writing are a function of both cognitive and affective operations.
7. Vocabulary is a major factor that enhances reading comprehension. Reading requires the ability to assign or deduce meaning from individual words and clusters of words. Writing requires the ability to evoke meanings, often as images of things and sounds, and to choose those which accurately represent ideas, relationships, images and sounds.

Many studies have been conducted in the area of the writing/reading relationship. For example, Dionisio used writing in her sixth grade remedial reading program. She took time from formal reading instruction for writing. The reading scores of the children went up significantly. She discovered that when reading was approached through writing, both skills benefited. A child wanting to know more about a topic read for information. Ability to recall this information at a later date indicated an increase in comprehension [3:746-50].

After working on functional writing activities (e.g. filling out an application form, making a grocery list, writing a personal letter), Hughes indicated that "...the most interesting part to me is that, although we were not working on reading skills during this time, the class raised its reading average and vocabulary average from November to

November..."[16:8].

A study to improve reading comprehension was conducted on seventy freshman in a remedial reading course. Thirty-five were taught reading the traditional way and thirty-five were taught the same way plus ten minutes per day of writing. The results of the posttest showed improved reading comprehension in the experimental group [14:7].

Walker-Lewis did investigations to determine if relationships between reading and writing can serve as a tool to improve the reading comprehension of underprepared college students. She used seventy-four academically underprepared college students attending State University of New York College at Old Westbury. The subjects comprised an experimental and a control group whose reading instruction emphasized integrated reading/writing strategies and traditional methods. The researcher concluded that: (1) It appears feasible to use writing to improve the reading comprehension of academically underprepared college students. (2) The experimental subjects' written comprehension of ideas appeared to be positively influenced by the emphasis on writing for expressive as well as receptive modes of language communication. (3) The subjects in the integrated reading/writing group demonstrated more positive attitudes toward reading and writing than subjects in the traditional non-integrated group [12:2053A].

After reviewing literature on the effects of writing on reading comprehension and reading achievement, studies have

shown that reading is closely interwoven with all the other language arts, especially writing. By integrating reading and writing, the teacher will have a program that will provide children with the opportunity to feel the power of their own language. The instructional context is such that they can come to value the unique properties of the way others use words encountered while reading. Reading and writing are both involved with internalizing and thinking about language and are not separate in this sense [1:812].

Language Experience

Language experience stories are rich sources of children's knowledge about written language--including knowledge that text is a meaningful communication from an author [11:772].

Though used predominantly in the primary grades, the activities essential in language experience teaching can be adapted to reading instruction at any grade level. This approach is especially useful in building background or increasing comprehension ability for disadvantaged children. It is a method for guiding students in reading by developing their speaking vocabulary, helping them to learn how printed words look, giving them practice in associating the printed form with the sound of words they know, and helping them to read stories they themselves have dictated. Oral language, reading and writing thus develop together [18:77-78].

If beginning reading instruction helps mold the child's conception about the purpose of reading, then it is

essential for the teacher to emphasize comprehension in early instruction. In language experience activities, language and experience are deliberately linked. The use of dictation as texts for instruction is utilized into comprehension activities [11:772].

Stauffer and Hammond conducted a comparative study of the effectiveness of a language experience approach to a basal reader approach in first grade reading instruction. They then extended the study into second and third grades.

At first grade level it was found that the experimental population using the language experience approach scored significantly higher at the .01 level of confidence. They scored higher in word recognition, paragraph meaning, and spelling[25]. The second grade experimental group scored significantly higher on the Gates Primary Test of Word Recognition, Sentence Reading, and Paragraph Meaning [25]. When the study was extended into third grade, on individually administered tests, the experimental group showed superior performance [25].

> These findings led Stauffer and Hammond to state that: The evidence is clear. An elementary curriculum which utilizes a language experience approach to reading instruction throughout the primary grades will reap significant benefits not obtained with a basal reader approach. The superior performance in reading by the children in this approach can most likely be attributed to the

functional use of all the communication skills on an interacting basis [25].

Hall, using an experimental-control group in a culturally disadvantaged area of Washington, D.C., found that: (1) The language experience approach was superior to the usual approach in improving reading readiness. (2) The language experience approach was superior to the usual approach in developing word recognition ability. (3) The language experience approach was superior in developing skill in sentence reading [21].

Investigators Vilscek and Cleland compared basal and language experience approaches in first grade reading instruction using 600 first graders in the Pittsburgh area. This study showed that the children using the language experience approach had statistically higher mean scores on the word meaning, paragraph meaning, vocabulary and word study sections of the Stanford Achievement Test [26].

Sentence Combining

One of the most promising approaches which has surfaced is one which integrates reading comprehension and writing through sentence combining [15:1]. The students are given two or more short sentences that they combine into one longer complex sentence. Results of studies to determine the effects of these activities on the improvement of writing and reading comprehension point to the possibility of a symbiotic technique - - one which

clearly reveals the interrelatedness of reading and writing in the communication process [13:226]. The studies which have attempted to determine the effects of sentence combining on reading comprehension are not nearly as encouraging. However, there is reason for optimism. Because research has correlated the developmental sequence of growth in both reading and writing, it seems logical that research in sentence combining which originally centered on writing should now broaden its focus to explore the effects of this technique on the reading process [22].

O'Hare hypothesized that the teaching of syntactic manipulation would have a 'rub-off' effect on the overall quality of student writing. Thus, he viewed sentence combining as an actual tool to teach the composition process [23]. Evanechko, Ollila and Armstrong posit that if fluency and control of syntactic complexity are important competencies underlying reading achievement, then developing these two competencies in students may well improve reading performance [4:325].

Bever and Bowers state "a reading program ought to develop sentence attack, just as earlier it developed word attack: and it ought to develop grammatical, structural recognition just as earlier it developed word recognition [20:24]." Combs reports that in a study conducted to determine the positive effects of sentence combining practices on reading comprehension the results showed that the experimental group experienced significant

gains in reading comprehension scores [2:20-21].

Recent research which deals directly with the relationship between sentence combining and reading comprehension is not overpowering. It may be that traditional measures of reading comprehension are insensitive to change resulting from sentence combining. However, implications point to the need for future research [13:230].

Dialogue Journals

Dialogue journals are used to develop the following skills: reading, comprehension, sound-symbol relationships, inference and motor skills. There is a daily review by the children of acquired skills and preparation for the addition of new materials. A further value of the journal is that it can become a bridge between the students' lives outside school and activities they engage in at school which will enhance the teacher's understanding of any environment- ally produced learning difficulties a student might exhibit [10:27-32].

In dialogue journals, the child receives a response to what she/he has written. All communication between teacher and pupil is kept in a special notebook. The child may write about what she/he is confused about, what she/he sees, thinks or wants to complain about, etc. The teacher then responds by commenting, asking questions, and thus encouraging the children to express themselves in writing. The children must read the response from the teacher,

understand and integrate the information and then construct a coherent response [8:14].

Certain guidelines should be followed:

1. The purpose of the journal is to encourage written expression - teacher responds to content, not form.
2. The teacher's response should encourage further written expression from the child.
3. The journal is a private communication between child/teacher.
4. The journal helps children develop awareness of purposes of reading/writing as communication processes and focuses on meaning as the central objective of both processes [6:512-15].

Although most reading and writing programs are based on the premise that writing is an outgrowth of reading, considerable evidence suggests that reading and writing should be taught simultaneously. The two processes positively influence each other and both develop as a natural extension of children's desire to communicate.

Arrangement Plan

To achieve proficiency in writing and speaking - the expressive language skills - or in reading and listening - the receptive language skills - a child requires carefully planned instruction and instructional experience [24].

In the arrangement plan, the students are shown that stories are arranged in chronological (sequential) order. This is accomplished by presenting and discussing activities

that are prevalent in the students' life, since time order in such personal narratives is understood because it has been experienced. The children are taught to arrange their ideas into sentences that show the time order of beginning, middle and end. They are encouraged to use words such as then, later and next [8:12-13].

Thus, oral interaction leads into writing. This plan helps students build schemata for comprehending textual material they read. The writing activities, which encourage children to reconstruct ideas sequentially, clearly advance comprehension [7.9].

Summary

Comprehension is the main goal of reading. A teacher has a variety of instructional programs from which to choose material to increase reading comprehension. Those could include activities from the following areas:

1. Language experience in which the child's oral language, reading and writing develop together.
2. Sentence combining in which the child learns to form longer, more complex sentences.
3. Dialogue journals which encourage the child to express himself in writing and respond to communication from the teacher.
4. Arrangement plan which reinforces the idea of sequential order using personal narratives.

Thus, the purpose of this study was to determine if a program in written composition utilizing various strategies

would produce positive results in reading comprehension for the experimental group of second graders.

CHAPTER 3

METHODS AND PROCEDURES

Introduction

To enable the researcher to collect the necessary data concerning the effects of writing activities on reading comprehension, a study was conducted on the second grade classes of Linden Elementary School.

Linden Elementary School is located on the east end of Clarksburg, West Virginia. Linden has an enrollment of 268 pupils in grades K-6. Thirteen classroom teachers and a learning disabilities teacher comprise the regular staff.

Since Linden School has approved 45.9 percent of filed applications for free breakfast/lunch and .1 percent for reduced breakfast/lunch, the students have the services of a remedial reading instructor [27]. A school qualifies for remedial services when 25 percent or more of the students qualify for free or reduced meals [28].

Of the 268 pupils who attend Linden, 39 percent are from the Anmoore area requiring transportation. The remainder of the pupils are from the Linden vicinity which is the area encompassing Monticello Avenue east toward the school and P.K. Addition.

The Testing Instrument

The testing instrument used in this study was the

Comprehensive Tests of Basic Skills, Label C, Form S (CTBS) which has a grade range of 1.6 - 2.9. The skill area of reading was divided into two separate tests; these being Reading Comprehension: Sentences and Reading Comprehension: Passages. One test included Reading Comprehension: Sentences which consists of twenty-three items. Each item consists os a printed sentence with a missing word. The answer choices are staggered within the sentence at the point where the missing word occurs. The items measure the ability to comprehend the sentence and to select the word that is semantically and syntactically best to complete the sentence. The second test, Reading Comprehension: Passages, consisted of six brief passages or letters and eighteen items relating to the passages. The items measure specific skills in both literal and critical comprehension, including literal recall, rewording of details, using context clues to answer questions, stating the main idea, and interpreting the story to reach a conclusion.

The Design of the Study

The two-group pretest-posttest design was used in this study. This type of experiment has (1) a pre-evaluation of the control and experimental groups, then (2) the influence of the treatment (writing activities) on the experimental group, and finally, (3) a post-evaluation on the control and experimental groups. With this design, the dependent variable is measured before the independent variable is applied. The amount of change is then measured. The steps to be taken are:

1. Administer a pretest to the groups,
2. Expose the experimental group to the writing activities,
3. Administer the posttest to the groups after a twelve week period,
4. Compare pretest and posttest by performing a t-test at the .05 level of significance to ascertain the results,
5. Compare the pretest and posttest mean scores of the control and experimental groups.

Administration and Collection Procedures

The CTBS test was administered to the control and experimental groups as a pretest on January 12, 1984.

The experimental group was then exposed to a writing program and received classroom instruction for approximately thirty minutes each school day. The classroom instruction was taught by the researcher, and consisted of language experience activities. The primary activities were from Language Experiences in Reading by Roach Van Allen and Claryce Allen. Examples of the activities are found in Appendix J.

The CTBS test was given to the control and experimental group as a posttest twelve weeks later. The same researcher and the same testing conditions were used. However, only those members of the experimental group who took the pretest and completed at least 60 percent of the writing activities were used in the final data summary. After each testing,

the CTBS test was hand scored by the researcher and scores were recorded for each student on each of the two categories of the CTBS test utilized.

Treatment of the Data

To measure a student's progress between successive testings, the expanded standard score was utilized. These scores are produced from a single, equal interval scale of scores across all grades for use with all levels of CTBS/S. The score, expressed in a three digit number, enabled the user to chart comparisons between the control group and the experimental sample over the twelve week interval even though they neither started nor ended the period on the same level of achievement.

A t-test was then performed on each set of pretest-posttest data (the means) to determine whether or not a significant difference at the .05 level existed between the pretest and posttest experience. If the t-value calculated for a set of data was less than the appropriate critical t (2.069), it was concluded that there was no significant difference between the two groups for the time period spanned by the data. Mean scores of the pretest-posttest data were also compared for significant differences between the control and experimental group in the time frame utilized.

Summary

A study was conducted on the second grade class of Linden Elementary School. The testing instrument used was

the Comprehensive Tests of Basic Skills, Label C, Form S (CTBS) which has a grade range of 1.6 - 2.9. The area of reading was divided into two tests: Reading Comprehension; Sentences and Reading Comprehension; Passages.

The CTBS test was administered to the control and experimental groups as a means of pre-evaluation. After exposing the experimental group to writing activities for twelve weeks, a post-evaluation of the control and experimental groups was given. A t-test was then performed on each set of data to determine whether or not a significant difference at the .05 level existed between the pretest and posttest experience.

CHAPTER 4

THE RESULTS

The Statement of the Problem

This research was designed to investigate the effect, if any, of writing activities on reading comprehension. The testing instrument used was the CTBS/S, Label C, Form S. Hypothesis 1 stated that there would be no significant difference in achievement between the experimental and control groups on the pretest or posttest.Hypothesis 2 stated that the experimental and control groups would show no mean score differences between the pretest and the posttest.

Hypothesized Results

The data yielded by this pretest-posttest design were analyzed by examining the significance (at the .05 level) of the difference between the pretest and the posttest for Comprehension: Sentences and Comprehension: Passages. The mean scores of these tests were also compared.

Tables 1 and 2 show the pretest and posttest results for Comprehension: Sentences. Tables 3 and 4 show the pretest and posttest for Comprehension: Passages.

Table 1

Comprehension: Sentences

Pretest Results

	Experimental		Control
Number of Students	13		12
Pretest Mean	300		306
t-Value		.69	
Critical Value		2.069	
Significant Difference		None	

Table 2

Comprehension: Sentences

Posttest Results

	Experimental		Control
Number of Students	13		12
Posttest Mean	306		304
t-Value		.22	
Critical Value		2.069	
Significant Difference		None	
Difference in Mean Score Pretest to Posttest	+6		-2

Table 3

Comprehension: Passages

Pretest Results

	Experimental		Control
Number of Students	13		12
Pretest Mean	285		302
t-Value		1.83	
Critical Value		2.069	
Significant Difference		None	

Table 4

Comprehension: Passages

Posttest Results

	Experimental		Control
Number of Students	13		12
Posttest Mean	295		291
t-Value		.398	
Critical Value		2.069	
Significant Difference		None	
Difference in Mean Score Pretest to Posttest	+10		-11

Experimental Group

The experimental group (E) showed an improvement in mean scores on both areas of the comprehension tests. The sentence comprehension mean increased from 300 to 306 (+6) while the passage comprehension mean went from 285 to 295 (+10). Six students (E5, E6, E8, E9, E11, E12), Showed gains in both areas of comprehension. Sentence comprehension indicated seven higher expanded scores (E5, E6, E8, E9, E11, E12, E13), two lower scores (E2, E7), and four scores that did not change (E1, E3, E4, E10). Passage expanded scores indicated nine higher scores (E4, E5, E6, E7, E8, E9, E10, E11, E12), two lower scores (E1, E13), and two scores that showed no change (E2, E3). (See Table 5, page 28).

Control Group

The control group (C) showed a decrease in mean scores on both areas of the comprehension tests. The sentence mean decreased from 306 to 304 (-2) while the passsage mean went from 302 to 291 (-11). No students showed gains in both areas. Sentence comprehension indicated three higher expanded scores (C2, C3, C12), three lower scores (C9, C10, C11), and six scores that did not change (C1, C4, C5, C6, C7, C8). Passage comprehension scores resulted in two higher scores (C7, C10), seven lower scores (C1, C4, C5, C6, C9, C11, C12), and three scores that did not change (C2, C3, C8). (See Table 6, page 29).

Table 5
Experimental Group Pretest and Posttest Composite Results

Student	Comprehension: Sentences					Comprehension: Passages					
	Pre-Mean 300	+or-Mean	Post Mean 306	+or-Mean	Change in Score	Pre-Mean 285	+or-Mean	Post Mean 295	+or-Mean	Change in Score	Gains In Both Areas
E1	329	+	329	+	NC	325	+	305	+	L	
E2	329	+	311	+	L	305	+	305	+	NC	
E3	329	+	329	+	NC	305	+	305	+	NC	
E4	329	+	329	+	NC	305	+	325	+	H	
E5	311	+	329	+	H	293	+	325	+	H	*
E6	300	0	311	+	H	286	+	305	+	H	*
E7	300	0	293	-	L	277	-	293	-	H	
E8	285	-	329	+	H	277	-	305	+	H	*
E9	272	-	282	-	H	277	-	281	-	H	*
E10	288	-	288	-	NC	274	-	286	-	H	
E11	293	-	311	+	H	274	-	286	-	H	*
E12	270	-	275	-	H	268	-	286	-	H	*
E13	259	-	267	-	H	242	-	233	-	L	

L = lower
H = higher
NC = no change
* = gains in both areas

Table 6
Control Group Pretest and Posttest Composite Results

Student	Comprehension: Sentences					Comprehension: Passages					
	Pre-Mean 306	+or- Mean	Post Mean 304	+or- Mean	Change in Score	Pre-Mean 302	+or- Mean	Post Mean 291	+or- Mean	Change in Score	Gains In Both Areas
C1	311	+	311	+	NC	325	+	286	-	L	
C2	311	+	329	+	H	325	+	325	+	NC	
C3	311	+	329	+	H	325	+	325	+	NC	
C4	311	+	311	+	NC	325	+	305	+	L	
C5	279	-	279	-	NC	325	+	264	-	L	
C6	329	+	329	+	NC	305	+	293	+	L	
C7	329	+	329	+	NC	305	+	325	+	H	
C8	300	-	300	-	NC	293	-	293	+	NC	
C9	329	+	267	-	L	293	-	264	-	L	
C10	300	-	293	-	L	277	-	305	+	H	
C11	277	-	275	-	L	264	-	260	-	L	
C12	288	-	300	-	H	256	-	250	-	L	

L = lower
H = higher
NC = no change
* = gains in both areas

Comparison of Groups

A comparison of the posttest results of the experimental and control group is shown in Table 7. The results indicate that seven children in the experimental group had higher posttest mean scores on Comprehension: Sentences as compared to three children in the control group.

Comprehension: Passages results reveal that nine experimental group children had higher posttest mean scores. Two children from the control group had higher posttest scores on this test.

Six children from the experimental group exhibited gains in the mean score on both areas of the test. No children from the control group had higher posttest scores in both areas of testing.

Table 7

Experimental/Control Group
Comparison of Posttest Results

	Experimental	Control
Comprehension: Sentences		
Higher Score	7	3
Lower Score	2	3
No Change in Score	4	6
Mean Score (Pre/Post)	300/306	306/304
Comprehension: Passages		
Higher Score	9	2
Lower Score	2	7
No Change in Score	2	3
Mean Score (Pre/Post)	285/295	302/291
Students Showing Mean Gains In Both Areas	6	0

Summary

In general terms, Hypothesis 1 results may be summarized as follows: The experimental group did not show a significant difference when compared to the control group, thereby resulting in acceptance of the hypothesis.

Hypothesis 2 results showed that the experimental group did show a gain in mean scores in both areas of comprehension when compared to the control group. The control group showed a decrease from pretest to posttest in both areas of comprehension tested. Therefore, the hypothesis is rejected.

It should be noted that in each case the experimental group showed an improvement in mean scores while the control group showed a decline. The effect of these mean score changes was to cause the mean scores to converge closer to each other on the posttest results in both areas of comprehension. Therefore, the t-test showed no significant difference.

However, the experimental group gained six points from pretest to posttest on Comprehension: Sentences while the control group declined two points. The experimental group increased ten points from pretest to posttest on Comprehension: Passages while the control group declined eleven points. The result was that the t-test did not reflect a significant difference.

Nevertheless, the treatment resulted in an improved mean score for the experimental group while the mean score

for the control group declined, thus demonstrating a positive effect on the subjects.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was conducted to investigate what effect, if any, a planned program of writing activities has on reading comprehension. It was found that students in the second grade experimental group did not show a significant difference at the .05 level of significance in reading comprehension.

However, students in the experimental group did show an improvement in mean scores in both areas of the comprehension test. The experimental group enjoyed the language activities and were more exposed to written language, taping and oral language. They had access to and use of audio-visual equipment (record player, filmstrip projector, tape recorder) which was a new medium of communication for many of them. These experiences were mentally more stimulating than "just books", thus increasing their attention span and desire to read and write language.

Of the experimental group, five students are reading on grade level (2^2). Comprehension of sentences showed three of these students with perfect pre- and posttest scores while two students had higher posttest scores. Comprehension of passages revealed one student from the 2^2

group with perfect pre-posttest scores and three students showing higher posttest scores. Seven students from the experimental group comprised a group which was reading one semester below grade level (2^1). Comprehension of sentences identified four of these students as having higher posttest scores, while one had no change in scores. Comprehension of passages had six students achieving higher posttest scores and one student with perfect pre-posttest scores.

One student was one year below grade level in reading (1^2). This student increased in comprehension of sentences. This child came from a poor background and had been in several schools before entering Linden. He has had no consistency in his learning atmosphere and no parental support of his educational environment. This could be a contributing factor to his level of reading. This child was confronted with experiences with vocabulary and multifaceted approaches to learning. Individual motivation of the treatment procedures may have been factors in his increase in comprehension.

The researcher found that the initial reading levels were not important to the investigation. All groups showed a parallel degree of advancement. Evidently, the activities were equally stimulating to all groups. All levels were eager to participate in the activities and willing to share experiences. Finally, although any change in overall performances showed no statistical significance, the study

appears to have been worthwhile in terms of higher mean scores for some and signs of increased motivation for all.

Table 8

Experimental Group
Pretest Results by Reading Level

	Reading Group		
	2^2	2^1	1^2
Comprehension:			
Sentences			
Higher Scores	2	4	1
Lower Scores	0	2	0
No change	3	1	0
Perfect Pretest	3	1	0
Perfect Posttest	4	1	0
Passages			
Higher Scores	3	6	0
Lower Scores	1	0	1
No Change	1	1	0
Perfect Pretest	1	0	0
Perfect Posttest	2	0	0
Gains in Both Areas	2	4	0

Limitations

A study of this nature is limited by several factors. One of these is the overall low socio-economic background of the school population as evidenced by the percentage of free/reduced meals and the presence of an ECIA reading teacher. Therefore, the sample does not represent an accurate cross-section of the general school population.

Another consideration is the small size of the groups

utilized by the researcher for statistical purposes. The second grade population consisted of thirty-two students who were randomly divided into two groups. Several other variables that influenced the study should be mentioned. (1) The length of time devoted to the study (twelve weeks) was a short time in which to effect change in disadvantaged students. (2) The type of test used (CTBS) or the main style of presentation (language experience) could have modified the test results. (3) The materials for the study were incorporated into the classroom reading instruction; thus no concentrated block of time was allocated for the treatment.

Recommendations

If further studies in this area are conducted, the researcher could recommend several changes in the way the investigation should be conducted. These would include, but not be limited to, the following:

1. Increase the size of the student population of the experimental and control groups for statistical purposes.
2. Vary the socio-economic level of the group as opposed to the original group utilized in this study.
3. Group students according to mental ability to try to ascertain what group, if any, benefits most from the treatment.

4. Change the type of activities used by the researcher (see Appendix A) to a more balanced treatment emphasizing speaking, listening, reading, and writing by gearing the activity to type of learner involved (kinesthetic - auditory - visual) and the use of the CTBS test.
5. Keep the same types of activities (see Appendix A) and change the testing instrument to one more appropriate for group involved.
6. Change the time allotted to the investigation - longer, more concentrated effort on a daily basis - and an extended length of time for the study to be presented.

The children involved in the study were treated to activities that: (1) increased their awareness of the relationship of speaking, reading and writing; (2) expanded their vocabulary; (3) improved style and form in writing; and (4) gave the child the opportunity to integrate, assimilate and organize ideas and information.

Summary

In conclusion, the findings of this study have direct implication for improving reading comprehension by using writing activities. Although improvement was not indicated by statistical measures, individual children did show gains in one or both areas being tested after the treatment.

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APPENDICES

APPENDIX A

Types of Activities

Literal Comprehension	Sentence Structure	Interpretative Comprehension
Sequencing the Alphabet	Use of Adjectives	Drawing Conclusions
Alphabetical Order	Writing Sentences	Sequencing-Visual Pictures
Main Idea	Nouns - Verbs	Visual Discrimination
Recalling Details	Compound Words	
Sequencing Stories	Relationship sounds/letters	
	Syllables	
	Abbreviations	
	Rhyming Words	
	Synonyms/Antonyms	
	Homonyms	

APPENDIX B

Comprehension: Passages
Experimental Group, Pretest

	Experimental Group A Mean for Experimental Group A = 285		Control Group B Mean for Control Group B = 302
	(A)	(A-MA)	$(A-MA)^2$
1.	325	40	1600
2.	305	20	400
3.	305	20	400
4.	305	20	400
5.	293	8	64
6.	286	1	1
7.	277	-8	64
8.	277	-8	64
9.	277	-8	64
10.	274	-11	121
11.	274	-11	121
12.	268	-17	289
13.	242	-43	1849

The sum of the squared deviations = 5437

t = 1.83

The mean difference between experimental group and control group is experimental group -7.

APPENDIX C

Comprehension: Passages
Control Group, Pretest

	Experimental Group A Mean for Experimental Group A = 285		Control Group B Mean for Control Group B = 302
	(B)	(B-MB)	$(B-MB)^2$
1.	325	23	529
2.	325	23	529
3.	325	23	529
4.	325	23	529
5.	325	23	529
6.	305	3	9
7.	305	3	9
8.	293	-9	81
9.	293	-9	81
10.	277	-25	625
11.	264	-38	1444
12.	256	-46	2116

The sum of the squared deviations = 7010

$t = 1.83$

APPENDIX D

Comprehension: Passages
Experimental Group, Posttest

	Experimental Group A Mean for Experimental Group A = 295		Control Group B Mean for Control Group B = 291
	(A)	(A-MA)	$(A-MA)^2$
1.	305	10	100
2.	305	10	100
3.	305	10	100
4.	325	30	900
5.	325	30	900
6.	305	10	100
7.	293	-2	4
8.	305	10	100
9.	281	-14	196
10.	286	-9	81
11.	286	-9	81
12.	286	-9	81
13.	233	-62	3844

The sum of the squared deviations = 6587

t = .398

The mean difference between experimental and control group is experimental group +4.

Experimental group pretest to posttest +10
Control group pretest to posttest -11

APPENDIX E

Comprehension: Passages
Control Group, Posttest

	Experimental Group A Mean for Experimental Group A = 295		Control Group B Mean for Control Group B = 291
	(B)	(B-MB)	$(B-MB)^2$
1.	286	5	25
2.	325	34	1156
3.	325	34	1156
4.	305	14	196
5.	264	-27	729
6.	293	2	4
7.	325	34	1156
8.	293	2	4
9.	264	-27	729
10.	305	14	196
11.	260	-31	961
12.	250	-41	1681

The sum of the squared deviations = 7993

t = .398

APPENDIX F

Comprehension: Sentences
Experimental Group, Pretest

	Experimental Group A Mean for Experimental Group A = 300		Control Group B Mean for Control Group B = 306
	(A)	(A-MA)	$(A-MA)^2$
1.	329	29	841
2.	329	29	841
3.	329	29	841
4.	329	29	841
5.	311	11	121
6.	300	0	0
7.	300	0	0
8.	293	-7	49
9.	288	-12	144
10.	285	-15	255
11.	272	-28	784
12.	270	-30	900
13.	259	-41	1681

The sum of the squared deviations = 7268

t = .69

The mean difference between experimental and control group is experimental group -6.

APPENDIX G

Comprehension: Sentences
Control Group, Pretest

	Experimental Group A Mean for Experimental Group A = 300		Control Group B Mean for Control Group B = 306
	(B)	(B-MB)	$(B-MB)^2$
1.	329	23	529
2.	329	23	529
3.	329	23	529
4.	311	5	25
5.	311	5	25
6.	311	5	25
7.	311	5	25
8.	300	-6	36
9.	300	-6	36
10.	288	-18	324
11.	279	-27	729
12.	277	-29	841

The sum of the squared deviations = 3653

APPENDIX H

Comprehension: Sentences
Experimental Group, Posttest

	Experimental Group A Mean for Experimental Group A = 306		Control Group B Mean for Control Group B = 304
	(A)	(A-MA)	$(A-MA)^2$
1.	329	23	529
2.	329	23	529
3.	329	23	529
4.	311	5	25
5.	329	23	529
6.	293	-13	169
7.	311	5	25
8.	311	5	25
9.	288	-18	324
10.	329	23	529
11.	282	-24	576
12.	275	-31	961
13.	267	-39	1521

The sum of the squared deviations = 6271

t = .22

The mean difference between experimental and control group is experimental group +2.

Experimental group pretest to posttest +6
Control group pretest to posttest -2

APPENDIX I

Comprehension: Sentences
Control Group, Posttest

	Experimental Group A Mean for Experimental Group A = 306		Control Group B Mean for Control Group B = 304
	(B)	(B-MB)	$(B-MB)^2$
1.	329	25	625
2.	329	25	625
3.	267	-37	1369
4.	329	25	625
5.	329	25	625
6.	311	7	49
7.	311	7	49
8.	293	-11	121
9.	300	-4	16
10.	300	-4	16
11.	279	-25	625
12.	275	-29	841

The sum of the squared deviations = 5586

t = .22

APPENDIX J

Examples of Language Experience Activities

*Animal in Rhyme - nonsense rhymes with illustrations (many words in our language end with the same sound as other words)

*Antonym Hunt - look in magazines, papers for words or pictures of antonyms (some words in our language are opposite)

*Barn Yard Song - learn song, write creative story about an animal on a farm, illustrate (we can have fun and provide entertainment for ourselves and others through writing)

*Beat Generation - filling in chart with appropriate words according to syllable heading (words have vowel sounds called syllables)

*Capital Letter Collage - using newspaper, magazines, etc., find all capital letters of alphabet, paste on paper (words are a combination of letters)

*Family Tree - color tree, put family member names on leaves (names begin with capital letters)

*Filmstrips - watch film silently, tape individual students telling story from viewing of film only (same pictures suggest different ideas to different people)

*Homonym Hunt - look in magazines, papers for words or pictures of homonyms (some words in our language sound the same, but are not spelled with the same letters)

*Join Us - word strips, combine noun with verb (sentence expresses a complete thought)

*Lower Case Letter Collage - using newspaper, magazines, etc., find all lower case letters of the alphabet, paste on paper (words are a combination of letters)

*Oral Animal - think of an animal, describe orally for others to guess (we can describe a thing in words without giving its name)

*Pets - draw and write reasons for "A Good Pet" and "Not A Good Pet" (we can read what others have written)

*Put Others Together - illustrate and write compound words (some words in our language can be joined together to form new words)

*Synonym Hunt - look in magazines, papers for words that are synonyms (some words in our language mean the same)

*Written Animal - think of an animal and describe it in writing for others to guess (we can describe a thing in written words without giving its name)